

HARRIS CORPORATION
EXPERIMENTAL LICENSE APPLICATION
2360-2390 AND 2421-2443 MHz
MELBOURNE/PALM BAY AREA, FLORIDA

DESCRIPTION OF EXPERIMENT

By this application, Harris Corporation (“Harris”) seeks experimental authority to conduct operations in the 2360-2390 MHz and 2421-2443 MHz bands in connection with a contract with the United States Armed Forces. The project, referred to as the “Sea Lancet” field demonstration, consists of communications tests using Sea Lancet Multi-Band Network Radio (MBNR) Terminals. These tests involve the use of seven antenna sites in the area of Melbourne/Palm Bay, Florida as sensor, relay, and destination nodes. Only six antennas will be operational at any given time. The communications terminals employ modified WLAN technology (802.11-a, -b, -g IEEE Standard), optimized for the tactical environment. However, in these tests, the WLAN approach will be used to communicate longer distances, and outside of the typical 802.11-a, -b, -g operating levels. In order to handle this robust task, various modifications have been made to the fundamental radio boards and protocols, and additional modules are required in each communications terminal. A Sea Lancet MBNR Terminal will be placed in each sensor, relay, and destination node. The tests will involve the simultaneous transfer of data from each sensor back to the destination node via the relay node. Throughput measurements will be done to measure the performance of the system and of each link. Harris serves as a subcontractor to Reliable Systems Services Corp. (“RSS”), which is under contract with the Department of Defense (U.S. Navy, SPAWAR-San Diego) to develop the MBNR prototypes. Contact information for RSS is:

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RSS contract number with DoD: 2240-002-HC